(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 7 July 2005 (07.07.2005)

PCT

(10) International Publication Number WO 2005/062133 A1

(51) International Patent Classification⁷: G03G 15/20, H05B 6/14

(21) International Application Number:

PCT/JP2004/019690

(22) International Filing Date:

22 December 2004 (22.12.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

2003-427808 2004-359888 24 December 2003 (24.12.2003) JP 13 December 2004 (13.12.2004) JP

(71) Applicant (for all designated States except US): CANON KABUSHIKI KAISHA [JP/JP]; 30-2, Shimomaruko 3-chome, Ohta-ku, Tokyo 146-8501 (JP).

(72) Inventors; and

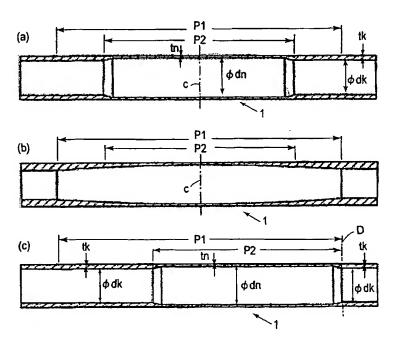
(75) Inventors/Applicants (for US only): SHIRAKATA, Jiro [JP/JP]; 1160-199, Hananoi, Kashiwa-shi, Chiba 277-0812 (JP). TAKEDA, Shouhei [JP/JP]; 2397, Ohaza-Shimotakai, Toride-shi, Ibaraki 302-0038 (JP). WATANABE,

Koki [JP/JP]; 2-15-12, Kubogaoka, Moriya-shi, Ibaraki 302-0104 (JP). WAKAHARA, Shinichiro [JP/JP]; 4-34-9, Kamakura, Katsushika-ku, Tokyo 125-0053 (JP). TAKEMATSU, Koji [JP/JP]; 3-5-14-101, Hakusan, Toride-shi, Ibaraki 302-0023 (JP). NISHIMURA, Kouichirou [JP/JP]; 1206-70, Ohaza-Mamiana, Inamachi, Tsukuba-gun, Ibaraki 300-2302 (JP).

- (74) Agent: YAMADA, Ryuichi; Toko International Patent Office, Hasegawa Bldg. 4F, 7-7, Toranomon 3-chome, Minato-ku, Tokyo 105-0001 (JP).
- (81) Designated States (unless otherwise indicated. for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH,

[Continued on next page]

(54) Title: HEATING APPARATUS



(57) Abstract: In order to prevent non-sheet passing portion temperature rise occurred in a non-sheet passing area of an electromagnetic induction heating member 1, leakage of magnetic flux is reduced by setting a Curie temperature of the heating member 1 to be smaller than an acceptable upper limit temperature and setting a thickness of the heating member so that a thickness tk in a Curie temperature arrival area (P1 - P2) is larger than a thickness tn in a Curie temperature non-arrival area P2 which is a conveyance area of a material to be heated having a minimum passing size.

GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.